

4. Field-notes on the Antelopes of Central South Africa, made during eight years spent in many different districts of the country. By F. C. SELOUS.

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(Plate LXV.)

The observations which I now offer to the Society have been made during the different hunting-expeditions which I enumerate below : they are entirely the results of my own personal experience of the animals themselves, and are not derived from information supplied by native or Dutch hunters.

In October 1871 I left the Diamond Fields, and, travelling through Griqualand, struck the Orange River at Keis, and following its northern bank reached Uisip, on the borders of Namaqualand, in the January following, getting back to the Diamond Fields in March. In April 1872 I again left the Diamond Fields, and travelling along the eastern border of the Kalahari desert, through Kuruman, Secheli's town, and Bamangwato, reached the Matabele country, 300 miles to the north-east of the latter place, in the following August. A few days later I started for the Mashuna country, and reached the river Umnyati in September. Here I remained hunting Elephants (principally in the "fly"-infested country to the north-east) until the end of the year. From January to June 1873 I was constantly travelling about the outskirts of the Matabele country, trading and shooting. In the beginning of June, I travelled to the country near the junction of the Gwai and Shangane rivers, and remained hunting Elephants in that district and throughout the mountainous country between the Gwai and the Victoria Falls until the following November, at the end of which month I returned to the Matabele country. From then until the following March I remained in the Matabele country, making a journey across the open downs to the south-east of Inyati and reaching the junction of the Ingezi and Lunti rivers. In the beginning of May 1874 I left the Tati gold-mine, and travelled with my waggon to Daka, about 60 miles south of the Victoria Falls. In the beginning of June I went on foot to the Falls, and then followed the course of the Zambesi and Chobe rivers to the neighbourhood of Linyanti, where I remained hunting for several months, returning to the waggon in October. I then made another hunting-trip amongst the hills to the east of the Victoria Falls. In the beginning of November (the waggon having started for the Matabele country) I travelled to the junction of the Gwai and Zambesi rivers, and from there cut right across country to the waggon-road, finding the waggon at Thammasetjie. In the end of December I again reached the Matabele country. In February 1875 I travelled down country to Natal and returned to England.

In March 1876 I again landed at the Cape, and after a five months' journey, travelling by bullock-waggon through the Cape

colony, Orange Free State, and Transvaal, and thence along the Marico and Limpopo rivers to Bamangwato, at last reached Tati, on the south-western frontier of the Matabele country, in August. Here I remained hunting on several tributaries of the Limpopo until the following December, when I trekked down to the Diamond Fields, returning to Tati again in April 1877. I then started at once for the Zambesi, reaching Daka in May. From that date until the end of October I was hunting on the Chobe in the neighbourhood of the Sunta outlet, and in the country between the Chobe and Mababe rivers. In Nov. 1877, after sending my waggons to the Matabele country, I crossed the Zambesi on foot at "Wankies" town, and, following its northern bank, reached the mouth of the Kafukwe in December. From here I struck to the north-west through the mountains beneath which the Kafukwe runs, and, travelling over the Manica plateau, reached "Sitanda's" town, situated near the swampy Lukanga river, in January 1878. In February I again reached the mouth of the Kafukwe river, and in the following month, crossing the Zambesi a little to the west of the mouth of the Sanyati (a tributary from the south), struck due south across country, and reached the Matabele country once more in May 1878. Here I was detained doing nothing through ill-health until August, when I made a hunting-trip to the north-eastern part of the Mashuna country in the neighbourhood of the Ganyane river, returning to the Matabele country in the end of December. I then went down to the Transvaal, and getting back to Bamangwato in April 1879, started on a hunting-expedition to the upper Chobe. Travelling through the desert to the Botletlie river, I followed its eastern bank for some distance and then struck across to the Mababe river, which I reached early in June. From this time until December I hunted on the Machabe, Sunta, and Chobe rivers, and then travelling through the great saltpans into which the Botletlie runs, reached Bamangwato again in January 1880. I then went down to the Transvaal and Diamond Fields, and in the end of May got back to the Matabele country again, and at once started on my last hunting-expedition to North-eastern Mashuna land, where I remained hunting until the end of the year. On leaving Mashuna land I travelled down country, and, skirting the western border of the Transvaal, reached the Diamond Fields in February 1881.

After this slight sketch of my routes, I proceed to give my notes upon the various Antelopes which I met with during these expeditions.

1. OREAS CANNA.

(*Eland* of the Dutch and English; *Pofo* of the Bechuanas; *Impofo* of the Amadebele; *Ee-pofo* of the Makalakas; *Mofo* of the Mashunas; *Insefo* of the Masubias and Batongas; *Oo-schefo* of the Macubas; *Doo* of the Masaras.)

The Eland is now extinct in the Cape Colony, Natal, the Orange Free State, Griqualand West, and the Transvaal, and almost so in all the countries watered by the tributaries of the Limpopo, to the west of the Matabele country. In the Kalahari desert to the west of

Secheli's and Bamangwato it is plentiful, but never now comes as far eastwards as the waggon-road between those two places. North of Bamangwato, along the roads leading to the Lake Ngami and to the Victoria Falls of the Zambesi, there are always a few Elands to be found, though they are usually very scarce; at times, however, large herds wander out of the Kalahari desert, as far eastwards as the waggon-road leading from Bamangwato to the Zambesi. These migrations usually happen in the months of February and March; and the Bushmen say that they are to be accounted for by the fact that at that time of year a particular sort of small bush is in leaf, of which Elands are very fond. In all the country between the Botletlie and Chobe rivers, Elands are still to be found in greater or lesser numbers, and I have often seen herds of over a hundred together. In the dry desert country through which the Chobe runs they are particularly plentiful. Again, if we take the country further eastwards, Elands are still to be found in considerable numbers to the north-east, east, and south-east of the district inhabited by the Amandebele, and in many parts with which I am acquainted are very plentiful. In the broken mountainous country extending all along the Zambesi eastwards, from the Victoria Falls to beyond the river Gwai, I never saw any Elands or their spoor; but in the sandy country immediately to the south they are fairly plentiful. Between the Chobe and Zambesi rivers I found Eland plentiful; and so far as I went to the north of the Zambesi I also found them.

The skins of Elands that I have seen from the Kalahari desert have no signs of a stripe upon them, and the dark mark above the knee on the inside of the fore leg is either very faint or altogether wanting. In April 1879 I shot several Eland cows about 60 miles north of Bamangwato, on the road to Lake Ngami. I looked at all of them very carefully, but could not detect the faintest sign of a stripe, though some of them had the patches on the inside of the fore legs of a light grey colour. During the following months I shot many Elands on the eastern bank of the Botletlie river, on the Mababe, and on both sides of the Chobe river. Every one of these Elands was more or less striped, some so faintly as to be barely perceptible, some very plainly. In the Mashuna country again, to the north-east of the Matabele country, every Eland cow is very plainly striped, many of them having the stripes quite as plain as they are on a Koodoo, and the patches on the inside of the fore legs of a deep black. The one Eland (a cow) which I shot to the north of the Zambesi was beautifully marked, having nine broad white stripes on each side, and a broad black line down the centre of the back. Elands that are much striped often have a whitish mark across the nose, in the same place as in the Koodoo.

Old Eland bulls have very little hair on their skins, and look a dark slaty blue colour, owing to the colour of the skin showing through the scanty hair; and on these old animals, naturally enough, no sign of stripes can be perceived. Old cows also turn to a slate-colour from the same cause. In every large herd of Elands, cows are to be seen of every shade of colour from pale fawn to bluish grey.

Therefore your old hunter, who knows of four species of Lions, and six or seven Rhinoceroses, says that there are two or three distinct species of Elands, the blue, the yellow, and the striped. An Eland bull that I shot last year in the Mashuna country, measured 5 ft. 9 in. at the wither. This measurement was carefully taken with a tape line, between two assegais fixed in the ground parallel to one another, the one at the fore foot, the other at the wither. This was an ordinary bull; and I feel sure that they attain a greater size in the more desert country further west; at least that is my impression, judging by the eye. The longest pair of Eland bull-horns I have seen measured 2 ft. 6 in. in length, the longest pair of cow-horns 2 ft. 10 in. The horns of very old bulls are often worn down to little more than a foot in length. Towards the end of the dry season, when the old grass is nearly all burnt off and the new has not yet sprouted, Elands in some parts of the country (in the Mashuna country, for instance) live entirely upon the leaves of bushes; and their flesh then becomes utterly tasteless. Their flesh has been very much overestimated in my opinion, and is not to be compared for flavour with that of the Buffalo, Giraffe, Hippopotamus, or White Rhinoceros, supposing, of course, that the animals are all fat and in good condition. An Eland bull when fat can be easily run down with an ordinary horse; but the cows often run with great speed and bottom. The Elands in the Mashuna country run, I think, much harder than those in the more desert countries further west. When pursued, they often bound high into the air, higher than the backs of their fellows.

Along the Chobe, the Elands drink regularly in the river, usually during the night or just at daybreak, and then feed away through the forest-clad sandbelts, and are seldom to be met with in the middle of the day within six miles of the river. In other parts of the country, however, where for several months in the year there is absolutely no water, Elands, in common with Gemsbuck and Giraffe, live and thrive; and these desert Elands appear to me to attain to a greater size than those found in the well-watered parts of the country. In these deserts at some seasons of the year a small kind of wild melon, which contains a considerable quantity of water, is plentiful; and in September and October, which is the driest season of the year, a white bulb, looking much like a turnip and full of water, is also very common in some parts of the country; and I have no doubt that these melons and water-containing roots are largely eaten by Elands and other animals.

2. STREPSICEROS KUDU.

(*Koodoo* of the Dutch and English; *Tolo* of the Bechuanas; *Ee-bala-bala* of the Amandebele; *Ee-zilarwa* of the Makalakas; *Noro* of the Mashunas; *Unza* of the Masubias; *Unzwa* of the Makubas; *Muzeeloua* of the Batongas; *Dwār* of the Masaras.)

A few Koodoos still linger in the Cape Colony; and in parts of Griqualand West this Antelope is not uncommon. From the Limpopo to the Zambesi, however, and in the Manica country to the north of

the Zambesi, it is found in the neighbourhood of every river I have visited except in those places where the natives have exterminated it. It is usually partial to hilly country covered with dense thickets; but hills are by no means necessary to its existence, as it is common in the thick bush along both banks of the river Chobe, where there are no hills whatever, and it is also plentiful in the wait-a-bit thorn-jungles on the lower Molapo just on the edge of the flat and sandy Kalahari desert. The ground-colour of female Koodoos and young males is a reddish or greyish brown, with eight or nine white stripes on each side; but the old males become a deep blue-grey, which is owing, I think, as in the case of the Eland, to the colour of the skin showing through the scanty hair. The longest pair of Koodoo horns I have ever seen measured 3 ft. $8\frac{1}{2}$ in. in a straight line from point to base. A pair the owner of which I shot in the Mashuna country last year measure 3 ft. 5 in. in a straight line from point to base and 5 ft. 4 in. along the curve.

3. TRAGELAPHUS SYLVATICUS.

(*Boschbok* of the Dutch; *Bushbuck* of the English; *Inkonka* (male), *Imbabala* (female) of the Zulus; *Serolobutuku* of the Bamangwatos; *Imbabala* (male and female) of the Amandebele, Batongas, and Masubias; *Ungurungu* of the Makubas.)

In speaking of this Antelope, I include all the Bushbucks that I have met with in different parts of the country; for, although those found on the banks of the Chobe are very different at first sight, both as regards size and colour, from those met with in the Cape Colony, I believe all to be specifically identical.

This Antelope is found everywhere in the belt of bush which runs along the coast-line of the Cape Colony and Natal, and which in some places extends to a considerable distance inland. Along the Limpopo and some of its tributaries it is also found, but does not extend its range far up the latter. Then, if we cross the watershed between that river and the Zambesi, we again meet with it on the banks of the latter river and on the lower part of some of its tributaries, such as the Gwai and Sanyati. In certain districts along the southern bank of the Chobe it is more common than anywhere else. It is, however, never met with except in places where dense bush comes right down to the water's edge; and on the Chobe, where I have seen most of these Antelopes, I have never found one at a distance of 100 yards from the river. From the Cape Colony to the Chobe all the Bushbucks I have seen have a bare place round the neck, as if they had worn a broad collar that had rubbed off all the long hair, leaving nothing but a soft velvety down. It is worthy of remark that the North-African Bushbuck (*Tragelaphus scriptus*) has not this bare place round the neck. In the Cape Colony the adult Bushbuck rams are of a deep dark brownish-black colour, with only two or three small white spots on the haunch and one or two on the shoulder. The adult females are of a light reddish brown, with white spots on the haunches and sometimes a few between the shoulder and the flank. The young rams are of a reddish brown more or less spotted.

On the Limpopo the adult rams are of a brownish grey, often without a sign of any spots, and the adult females of a dark red with a few white spots. The hair of the rams is longer than in the Colony. The young rams, however, are of a red colour and a good deal spotted, with a few faint transverse stripes; the young females are also more spotted than the old ones.

This is the Bushbuck which Gordon Cumming considered to be a new and undescribed species and named the "*Antelope roualeynei*," or "Bushbuck of the Limpopo." These Bushbucks are smaller than those found in the Cape Colony. If we now take the Bushbucks found on the tributaries of the Zambesi to the east of the Victoria Falls, the *adult* rams are in colour like the *young* rams found on the Limpopo, being of a dark red, thickly spotted on the haunches, shoulders, and sides with small white spots, with three or four faint white stripes down each side. The adult females are of a pale yellowish red, beautifully spotted, and also show a few faint white stripes. If we now take the Bushbucks found on the banks of the Chobe, we find that the adult male is of a very dark red colour, in places merging into a deep brownish black, most beautifully spotted with large white spots, there being as many as fifty on each side in some individuals, and in some cases as many as eight well-defined white stripes besides. There is also a mane of white hair running all down the back from the shoulder to the tail about 3 inches in length, which the animal can erect at pleasure. The young ram is of a pale reddish yellow, with the spots and stripes much more faintly marked than in the adult animal. The adult female is of a rich dark red, beautifully spotted with white, and with three or four faint white stripes on each side. There is also a deep-black line running all down the back. The young female is of a lighter red and not so much spotted.

It will thus be seen that whereas in the Cape Colony and on the Limpopo the young Bushbucks are more spotted than the adult animals, and gradually lose their markings as they become older, this order of things is exactly reversed on the Chobe and on the tributaries of the Zambesi, where the adult animals are far more beautifully marked than those that have not come to maturity. In the Cape Colony the average length of Bushbuck horns is about a foot; but they often attain a length of 14 in., and I know of one pair measuring $16\frac{1}{4}$ in. in length. On the Limpopo, Zambesi, and Chobe it is very rare to get a pair of Bushbuck horns exceeding a foot in length.

4. TRAGELAPHUS SPEKII.

(*Nakong* of the Batauwani at Lake Ngami; *Situtungu*, *Puwula*, *Unzuzu*, of the tribes on the Chobe and Central Zambesi; *N'zoé* of the natives of the Lukanga river, north of the Zambesi.)

This Antelope is only met with in the extensive swamps which exist in some parts of the interior of Africa. In the reed-beds of the Mababe, Tamalakan, and Machabe rivers it is to be found; and in the vast marshes through which the Chobe runs it must exist in considerable numbers, although, as it only emerges from the dense

reed-beds at night, it is scarcely ever to be seen. In 1879 I tried hard to shoot some of these animals on the Chobe, searching for them in a canoe amongst the reed-beds at early dawn and after sunset; but though I disturbed several, and heard them splashing away amongst the reeds and papyrus, I only saw one female alive, though one morning I found a fine ram lying dead that had evidently been killed fighting with a rival during the night. The head and feet of this animal I preserved. The female that I saw was standing breast deep in the water, in the midst of a bed of reeds, feeding on the young shoots that just appeared above the water. When she saw us she at once made off, making a tremendous splashing as she plunged through the water. The natives told me that very often when these Antelopes are met with under similar circumstances they do not attempt to run, but, sinking down in the water, submerge their whole bodies, leaving only their nostrils above the surface, and trusting that their enemies will pass them unobserved; they (the Kafirs) then paddle close alongside and assegai them from the canoe. As all the Situtungas the skins of which I saw had been killed with assegais, and not shot, I have no doubt that this statement is correct. Another way the natives have of killing them is by setting fire to the reeds when they become quite dry, and then waiting for the Situtungas in their canoes in one of the channels of open water by which the marsh is intersected. Driven forwards by the advancing fire, the Antelopes are at last obliged to swim across the open water to gain the shelter of the reeds on the further side; and the natives are thus often enabled to cut off and assegai some of them in mid stream.

I may here remark that it is a curious zoological fact that the Situtungas found on the Lower Chobe do not possess the power of being able to sleep beneath the surface of the water, or even of diving—such as is stated to be enjoyed by the same Antelopes met with by Major Serpa Pinto only about 200 miles further up the course of the same river.

An adult male Situtunga Antelope is just about the size of a male Lee-gwee, with a thick-set heavy body and very powerful neck. The hair is longer and more silky than in any other species. The longest pair of horns I have seen measured 2 ft. 1 in. in a straight line from point to base. The hoofs grow to a great length, and sometimes become white; and, as in the Lee-gwee, the space between the back of the hoof and the dew-claw is devoid of hair. In 1877 I obtained the skin of a fœtus Situtunga. The ground-colour was of a dark blackish brown, something the colour of an English mole's skin. This skin was very plainly striped and spotted with bands and spots of yellowish white, the stripes and spots being arranged as they are in the adult Bushbucks found along the southern bank of the Chobe. I had another skin of a very young animal, killed shortly after birth. This skin was already of a lighter ground-colour than that of the fœtus; and the stripes and spots had become much fainter. The skin of the adult animal is of a uniform greyish brown and altogether devoid of either spots or stripes. Like its

congener the Bushbuck, the Situtunga goes in pairs, and is not met with in herds. The females have not horns on the Lower Chobe, as as they are stated to have further north by Major Pinto.

5. ORYX GAZELLA.

(*Gemsbok* of the Dutch ; *Gemsbuck* of the English ; *Kukama* of the Bechuanas and Makalakas ; *Ko* of the Masaras.)

The Gemsbuck is almost entirely confined to the arid deserts of South-western Africa. In the Kalahari desert, to the west of Griqualand West, it is fairly plentiful; and all along the road leading along the eastern border of the desert from Kuruma to Bamangwato it is occasionally to be met with, becoming plentiful if one penetrates into the waterless country to the westward, but being unknown to the eastward, of the road. Along the waggon-road leading from Bamangwato to Tati there are a few Gemsbuck about Pelatsi, Serule, and Goqui; and they are sometimes to be met with on the upper course of the Mac-loutsi, Shashi, and Tati rivers. A few sometimes even wander as far eastwards as the Ramokwebani river. On the road leading from Tati to the Zambesi Gemsbuck are not often met with; but a few are occasionally to be seen in the neighbourhood of Thammasanka and Thammasetjie. A little further westwards, however, in the neighbourhood of the great salt pans, they are numerous, as they are also in all the country between the salt pans and the Botletlie river, whilst to the west of that river, right through the desert into Damaraland, they are said to run in large herds. Where I have met with them the country has either been open or covered with stunted bush; and along the waggon-road from Bamangwato to the Mababe their northern range seems to be limited by the heavily timbered sand-belts which run east and west immediately to the south of that river, and into which the Gemsbuck does not penetrate. North of the Mababe, in the direction of the Chobe, although many parts of the country appear well fitted for them, the Gemsbuck is unknown. As far as my experience goes, the Gemsbuck is far from being the fleetest or most enduring Antelope in South Africa, and in these respects cannot be compared with the Tsessebe or Hartebeest. I do not think it is either fleet or more enduring than the Sable or Roan Antelope; and I have myself run one to a standstill without firing a shot, and know of several other men having done the same thing. The horns of the cow become longer than those of the bull, as a rule; the longest pair of the former I have ever seen measured 3 ft. 10½ in., and of the latter 3 ft. 6 in.

6. HIPPOTRAGUS LEUCOPHÆUS.

(*Roan Antelope* of the English ; *Bastard Gemsbok* of the Colonial and Orange-Free-State Dutch ; *Bastard Eland* of the Transvaal Dutch ; *Qualata* of the Northern Bechuanas ; *Tai-hait-sa* of the Southern Bechuanas ; *Ee-taka* of the Amandebele ; *Ee-pala-pala chena* (White Sable Antelope) of the Makalakas ; *Impengo eetuba* (White Sable Antelope) of the Masubias ; *Oo-ka-mooh-wee* of the Makubas ; *Kwar* of the Masaras.)

I have twice met with the Roan Antelope to the south of Baman-gwato, once on the Limpopo and once on the Notuani¹. In the neighbourhood of the Tati in South-western Matabele land it is not uncommon; and all along the road from there to the Zambesi it may be met with, though nowhere plentiful; as far as I have been along the Chobe it is to be found sparingly, and also in the Mababe country. Throughout the Mashuna country it is tolerably plentiful; and in the Manica country north of the Zambesi also I saw a good many. In fact it is to be found over a vast extent of country in central South Africa, but is nowhere to be met with in very large numbers. A herd of twenty together is seldom to be seen. The Roan Antelopes differ very much one from another in colour, some being of a strawberry-roan, others of a deep dark grey or brown, and others again so light in colour as to appear almost white at a distance. The horns of the Roan Antelope bull seldom measure more than 2 ft. 6 in. in length measured over the curve, though I saw one, shot in the Mashuna country in 1878, whose horns measured 2 ft. 9 in.

7. HIPPOPOTRAGUS NIGER.

(*Zwart Wit Pens* of the Dutch; *Sable Antelope* or *Harrisbuck* of the English; *Potoquane* of the Southern Bechuanas; *Qualata inchu* of the Bamangwatos and Makalolos; *Umtjiele* of the Amandebele; *Pala-pala* of the Makalakas; *Impengo* of the Masubias; *Ookwa* of the Makubas; *Solupe* of the Masaras.)

At the present day a few Sable Antelopes are still to be found in South-western Matabele land, in the neighbourhood of the Ramokwebani, Shashani, and Samookwe rivers (tributaries of the Shashe). Along the waggon-road leading from Tati to the Zambesi it may be met with here and there, but is decidedly scarce. All along the Chobe river, as far as I have been, I have met with this Antelope, though sparingly. In the Mababe country and on the road leading from there to Bamangwato I neither saw a Sable Antelope nor the spoor of one, and do not think its range extends so far to the west. In the broken country to the south of the Victoria Falls, in the neighbourhood of the Pendamatenka and Daka rivers, it is not uncommon; but its true home is the higher portions of the Mashuna country to the north-east of the Matabele country. There it is the commonest Antelope, and may still be met with in herds of over fifty individuals, the usual number being from ten to twenty. However large the herd, I have never seen more than one full-grown bull with it, though there may be several half-grown ones, whilst in a large herd of any other kind of Antelopes two or more full-grown males are nearly always to be seen. On the Manica plateau, north of the Zambesi, Sable Antelopes are also to be met with. The longest pair of male Sable Antelope's horns I ever saw measured 45 inches over the curve, the longest pair of female 33 inches. In the Mashuna country and along the Chobe the average length of the horns of these animals is greater than in South-western Matabele land. As a rule the Sable Antelope

¹ A few Roan Antelopes are still to be found in Griqualand West.

runs very swiftly and has good bottom ; but in this respect different individuals differ considerably, as is the case with all animals ; and I have run down without much difficulty individual Sable Antelopes, and Roan Antelopes, and one Gemsbuck, whilst others have gone clean away from me. The Sable Antelope is often very savage when wounded, and, like the Roan Antelope and Gemsbuck, will commit terrible havoc amongst a pack of dogs ; indeed I have known one to kill three with three consecutive sweeps of its long scimitar-shaped horns.

8. GAZELLA EUCHORE.

(*Springbok* of the Dutch ; *Springbuck* of the English ; *Insaypee* of the Bechuamas ; *Eet-saypee* of the Makalakas.)

The Springbok is still found in the north-western portions of the Cape Colony, and throughout the Free State, Transvaal, and Griqualand West, where it has not yet been exterminated. Along the borders of the Kalahari desert it is common in many parts ; and on the salt pans between the Botletlie river and the waggon-road leading from Bamangwato to the Zambesi it is also plentiful. In common with the Gemsbuck and Hartebeest, however, its northern range is bounded by the thick forests which run east and west south of the Mababe river. I believe that to the west of Lake Ngami it has a more extensive range northwards.

9. ÆPYCEROS MELAMPUS.

(*Roode-bok* (pronounced *Roybok*) of the Dutch ; *Roybuck* of the English ; *Pālā* of the Bechuanas ; *Impālā* of the Amandebele ; *Ee-pālā* of the Makalakas ; *Inzero* of the Masubias ; *Umpārā* of the Makubas ; *Lubondwee* of the Batongas ; *Kug-ar* (with a click on the first syllable) of the Masaras.)

This Antelope I first met with on the Marico and Notuāni rivers, two tributaries of the Limpopo ; and from there northwards it is to be found along the banks of every river and stream wherever I have been, except in those places where the natives have exterminated or driven them away. They are nowhere more plentiful than along the Chobe, and may often be seen in herds of from twenty to a hundred together. There are very few males in comparison with the number of females, though I have sometimes seen a herd composed entirely of rams, ten or fifteen in number. They like thick cover along the river's bank, and are seldom seen at a distance of more than a mile from water, of the proximity of which there is no more certain sign than the presence of Impala Antelopes. In the rainy season they will often wander from pool to pool until they get to a considerable distance from their usual resort along a river, and thus are often found at some of the larger and more permanent vleys, such as Selinya and Boatlanarma, on the road between Secheles and Bamangwato. The Impalas found on the banks of the Limpopo are, I think, larger than those found on the Chobe, and their horns usually wider set. The largest horns I have ever seen were from the Limpopo, and measured 1 ft. 9 in. in a straight line from point to

base, with a spread of 18 inches. The largest pair I shot on the Chobe measured 1 ft. 8 in. in a straight line from point to base, with a spread of 1 ft. 4 in.; but the generality measure under 1 ft. 6 in. in length.

10. CERVICAPRA ARUNDINACEA.

(*Rietbok* of the Dutch; *Reedbuck* of the English; *Imzee-gee* of the Amandebele; *Ee-bee-pa* of the Makalakas; *Im-vwee* of the Masubias; *Um-vwee* of the Makubas; *Bemba* of the Masaras.)

The first place I met with this Antelope was on the banks of the Marico river, though I believe a few are still to be found here and there in the Transvaal. On the upper portions of the Tati, Shashi, Ramokwebani, and other tributaries of the Limpopo it is to be met with; and in the Matabele and Mashuna countries on both slopes of the watershed it is very common along the banks of every river, except, of course, in the inhabited parts, where it has been exterminated. During a journey along the eastern bank of the Botletlie river in 1879, I did not see any Reedbucks; but on the Mababe, Tamalakan, Machabe, Sunta, and Chobe rivers I found them very numerous. On the tributaries of the Zambesi east of the Victoria Falls, such as the Pandamatenka, Daka, and Gwai, it is common, as also along the Nata, a river running from the Matabele country westwards into the great saltpan. In fact throughout central South Africa it is to be found wherever there are open grassy or reedy valleys intersected by a stream of water, or large reed vleys. On the Manica plateau, north of the Zambesi, Reedbucks were particularly common, and I have there seen as many as eight feeding in close proximity to one another. As a rule one seldom sees more than three or four together; and of these two are usually young. They are animals that go in pairs, and in this particular differ altogether from the Waterbuck, Leechwee, or Pookoo Antelopes, which consort together in herds, and amongst which there is not more than one male for every ten females. Although the Reedbuck is never found far from water, it always keeps on dry ground; and when chased I have never seen one take to boggy ground, but have noticed that rather than cross a narrow stream of shallow water they will make a long detour, often running the risk of being cut off thereby. When alarmed they give a shrill whistle, very similar to that emitted by the Chamois. The longest pair of Reedbuck horns that I have ever seen measured 16 inches along the curve; and I have shot two specimens myself whose horns measured 15 inches. The ordinary length is from 12 to 13 inches.

11. COBUS ELLIPSIPRYMNUS.

(*Kring-gaat* of the Dutch; *Waterbuck* of the English; *Tumoga* of the Bechuanas; *Sidumuga* of the Amandebele; *Ee-tumuha* of the Makalakas; *Ee-kulo* of the Masubias; *Umkulamdumbo* of the Makubas; *Mukulo* of the Batongas; *Gwelung-gwelee* of the Masaras.)

The Waterbuck is still found on the upper Limpopo and its tributaries, such as the Shashi, Tati, and Ramokwebani, in herds of from

ten to twenty individuals. On the Zambesi and all its tributaries eastward of the Victoria Falls it is very plentiful, but is never found in herds of more than about twenty together. On the Chobe and its outlet the Sunta it is to be met with sparingly; but on the Mababe and Botletlie rivers I did not meet with any at all during my visit there in 1879. It is most partial to steep stony hills, and is often found at a distance of more than a mile from the nearest river, for which, however, it always makes when pursued. Though a heavy-looking beast, it can clamber with wonderful speed and sureness of foot up and down the steepest hillsides. It appears to me that the Waterbucks found on the Upper Zambesi and its tributaries do not attain to the same size as those found on the Limpopo. On the latter river the horns often attain to a length of over 30 inches, whilst on the Zambesi and its tributaries, such as the Omniati and Ganyane rivers, which take their rise in the high plateau of the Mashuna country, it is exceptional to obtain a pair measuring over 28 inches; and the longest I have met with were a pair the bearer of which I shot myself last year (1880) on the banks of the Ganyane river. These horns measured 31 inches along the curve. The flesh of the Waterbuck is very coarse and rather strong-tasted; and when they become fat the fat sticks to the mouth and clogs on the teeth, unless eaten when very hot. Wherever I have seen them Waterbucks vary much in colour, some being reddish brown, others a very dark grey.

12. *COBUS VARDONI*. (Plate LXV.)

Heleotragus vardoni, Kirk, P. Z. S. 1864, p. 657.

(*Impookoo* of the Masubias.)

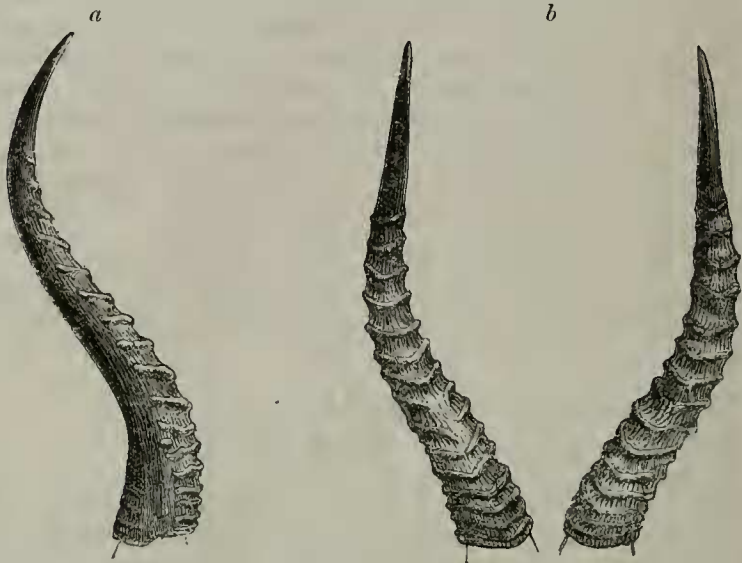
The only place where I myself met with this Antelope was in a small tract of country extending along the southern bank of the Chobe for about sixty miles westwards from its junction with the Zambesi.

They are never found at more than 200 or 300 yards from the river, and are usually to be seen cropping the short grass along the water's edge, or lying in the shade of the trees and bushes scattered over the alluvial flats which have been formed here and there by the shifting of the river's bed. Now and then a few must wander eastwards along the southern bank of the Zambesi as far as the Victoria Falls, as I saw my friend Mr. J. L. Garden shoot one in 1874 which was standing on the very brink of the precipice. This, however, is the only one I have ever seen to the east of Umbarira, though I have been several times backwards and forwards along the river's bank between that place and the Victoria Falls since. Along the Upper Zambesi from Sesheke to the Baroutse valley the natives report them common. Why the Pookoo does not extend its range further westwards along the southern bank of the Chobe I am at a loss to understand, as there does not appear to be any change in the character of the country or vegetation to account for it.

In size this Antelope stands about the same height at the shoulder as the Impala, but, being stouter built, must weigh considerably more. The colour is a uniform foxy red, the hair along the back

about the loins being often long and curly. The tips of the ears are black. The males alone bear horns, which are ringed to within three inches of the point, and curve slightly forwards. A fine pair will measure 16 inches along the curve.

These Antelopes are usually met with in herds of from three or four to a dozen in number; but in 1874, on one of the alluvial flats near the mouth of the Chobe, I observed as many as fifty in one herd, and once I saw twelve old rams together. During the period of anarchy, however, which ensued after Sepopo was murdered in 1876, a great many of the natives fled from Sesheke to the southern bank of the Chobe, and during their sojourn there committed great havoc amongst



Horns of *Cobus vardoni*.

a. Side view; b. front view.

the numerous herds of Pookoo; so that on my visit to the Chobe in 1877 I never saw more than ten or a dozen in a herd, and not one for every ten I had seen there in 1874. They are usually found on dry ground close to the water's edge, but when pursued do not hesitate to cross marshes or swim deep rivers. I have often seen Pookoo and Impala Antelopes feeding together, but have never seen the former Antelopes in company with Leechwee, for the reason that on the southern bank of the Chobe near its junction with the Zam-besi, where the Pookoo are found, there are no Leechwee, whilst in the swamps on the other bank, where Leechwee abound, there are no Pookoo.

13. COUS LECHE.

(*Leché*, *Lee-gwee* of the Makalolo; *Inya* of the Masubias; *Oonya* of the Makubas.)

This Antelope is first met with in the marshes of the Botletlie river,



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COBUS VARDONI.



and is very numerous in the open grassy plains which are always more or less inundated by the Tamalakau, Mababe, Machabe, Sunta, and Chobe rivers. It is also common along the upper Zambesi. In the swamps of the Lukanga river, about 150 miles to the south-west of Lake Bengweolo, which I visited in 1878, I found the Lee-gwee Antelope in large herds.

After Speke's Antelope, the Lechee is the most water-loving Antelope with which I am acquainted, and is usually to be seen standing knee deep, or even up to its belly, in water, cropping the tops of the grass that appear above the surface, or else lying just at the water's edge. As is the case with *Tragelaphus spekii*, the backs of the feet are devoid of hair between the hoof and the dew-claws, whilst in the Pookoo, as with all other Antelopes, this part is covered with hair. In some parts of the country Lee-gwee Antelopes are very tame; in others, where they are much persecuted by the natives, excessively wild. When they first make up their minds to run they stretch out their noses, the males laying their horns flat along their sides, and trot; but on being pressed they break into a springing gallop, now and then bounding high into the air. Even when in water up to their necks, they do not swim, but get along by a succession of bounds, making a tremendous splashing. Of course, when the water becomes too deep for them to bottom, they are forced to swim, which they do well and strongly, though not as fast as the natives can paddle; and when the country is flooded, great numbers are driven into deep water and speared. In the adult Lee-gwee the ears are of a uniform fawn-colour; but in the young animal they are tipped with black as in the adult Pookoo. In the flooded grassy plains in the neighbourhood of Linyanti on the Chobe, this beautiful Antelope may be seen in almost countless numbers, and I have counted as many as fifty-two rams consorting together. Some of these were quite young, with horns only a few inches in length; but there was not a single ewe amongst them. The longest pair of Lee-gwee horns that I have ever seen measured 2 feet 3 inches in length; but it is rare to get them over 2 feet long measured along the curve. In common with the Pookoo, they appear to me to be more tenacious of life than other Antelopes.

14. *NANOTRAGUS SCOPARIUS* (Schreb.): Brooke, P. Z. S. 1872, p. 642.

(*Oribi* or *Oribiki* of the Dutch; *Oribi* of the English.)

North of the Limpopo, this Antelope is only to be met with in the following districts, viz. in North-eastern Mashnua land from the river Umzweswe to beyond the river Hanyane, in the open valleys which occur between the forest belts near the watershed but to the north of the Machabe hills; on the exposed open downs nearer the watershed, and lying between the Machabe hills and Intaba Insimbi, I never saw any. On a large flat about fifty miles to the south of the junction of the Umfule and Umniati rivers, I saw a good many Oribi in 1880. Except in this district of the Mashnua

country, the only place south of the Zambesi where this Antelope exists is in the valley of Gazuma, an open boggy flat only a few hundred acres in extent, which is situated at a distance of about 30 miles to the south-west of the Victoria Falls. Then again a few are to be seen on the northern bank of the Chobe, on the open ground bordering the marsh, in the neighbourhood of Linyanti. North of the Zambesi they are reported by the natives to be very common on the Shesheke flat; and on the open downs of the Manica plateau I found them very numerous. One never sees more than two or three of these Antelopes together. The horns of the male attain to a length of about 5 inches, and are ringed at the base.

15. NANOTRAGUS TRAGULUS (Licht.).

(*Steinbok* of the Dutch; *Steinbuck* of the English; *Ingnweena* of the Amandebele; *Puruhuru* of the Bechuanas; *Ee-pen-nee* of the Makalakas; *Kahu* of the Masubias; *Kimba* of the Batongas; *Gai-ee* of the Masaras.)

This little Antelope is found all over South Africa, from the Cape to the Zambesi, except in the mountainous districts and tracts of very thick bush; it is fond of rather open country or open forest. Its horns attain sometimes a length of 5 inches, though from 3 to 4 inches is the usual size. North of the Zambesi I did not see any Steinbucks.

16. NANOTRAGUS MELANOTIS (Thunb.).

(*Grys Steinbuck*, *Sash-lungwān* of the Amandebele; *Teemba* of the Makalakas.)

This little animal is only met with, north of the Limpopo, in certain hilly districts of the more easterly portions of the interior. In the country inhabited by the Amandebele it exists, but is very scarce; but to the north and east, in all the hilly country in the neighbourhood of the Victoria Falls, and throughout the Mashuna country from the watershed to the Zambesi, it is fairly numerous. North of the Zambesi, as far as I penetrated, I met with the Grys buck.

17. NANOTRAGUS OREOTRAGUS (Schreb.): Brooke, P. Z. S. 1872, p. 642.

(*Klipbok* or *Klipspringer* of the Dutch and English; *Ee-go-go* of the Amandebele; *Ingululu* of the Makalakas; *Gereree* of the Batongas; *Kululu* of the Masaras.)

This little Antelope is found from the Cape to the Zambesi wherever there are stony hills. North of the Zambesi I did not see any. It is particularly plentiful in the curious detached stony hills of the Matabele and Mashuna countries. The horns of the males attain to about 4 inches in length, the females being hornless. The hoofs of this Antelope are very much like those of the European Chamois, being very short and small, and the hollows in them being very deep. All four hoofs could easily be placed on a penny piece. This enables them to obtain a foothold on little projecting pieces

of rock, as they bound up the sides of rocks that appear as steep as the side of a house. The coat of the Klipspringer is very peculiar, each separate hair being hollow. It makes excellent padding for saddles, being very light and elastic.

18. CEPHALOPHUS MERGENS.

(*Duiker* of the Dutch and English; *Puti* of the Bechuanas; *Impunzi* of the Amandebele; *Pemb-gee* of the Makalakas; *Unsa* of the Masubias and Makubas; *Insea* of the Batongas; *Goo-wah* of the Masaras.)

Wherever I have been, both north and south of the Zambesi, except in districts devoid of bush or covered with steep rocky hills, I have met with this Antelope. I have, however, only met with one species, though different individuals vary very much in colour, even though shot in the same district. Some skins are of a greenish colour, others of a reddish brown; and some that I shot on the borders of the Kalahari had less white about the belly than those I obtained further to the north-east. The longest pair of *Duiker* horns I have seen measured 5 inches in length, the usual length being 3 or 4 inches. They are ringed at the base. Although the females are almost always hornless, I have met with three examples bearing horns. One I shot myself on the Shashi in September 1876; another was shot by Mr. Thomas Ayres in May 1880, near the junction of the Marico and Limpopo rivers, and a third by Mr. Edward Sefton near Zeerust in the Transvaal.

19. ALCELAPHUS CAAMA.

(*Hartebeest* of the Dutch and English; *Khama* of the Bechuanas; *Ingama* of the Makalakas; *Khama* (with a click) of the Masaras.)

The range of this Antelope is very similar to that of the Gemsbuck. It is still found in Griqualand West, in some parts being fairly plentiful. All along the eastern border of the Kalahari desert it is also to be found, and extends as far east as the river Serule on the road from Bamangwato to Tati. In the neighbourhood of the salt-pans lying between the Botletlie river and the road from Bamangwato to the Zambesi it is very plentiful and may be met with in large herds. It does not, however, extend its range to the north of these salt-pans, and is unknown in all the country between the Chobe and Mababe rivers, as it is also in the Matabele and Mashuna countries. It is very fleet and enduring, and only second in these particulars to the Tsessebe.

20. ALCELAPHUS LICHTENSTEINI.

(*Konze* of the Masubias; *Inkulanondo* of the Mashunas.)

This Antelope I only met with on the open downs of the Manica plateau, north of the Zambesi. As I have only seen the horns of the *Inkulanondo* (which exists in the neighbourhood of the river Sabi, in South-eastern Mashuna land, and in Unzeilas country), it may not turn out to be identical with the *Konze*, though Sir